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Andrew W. Leung, Ethan L. Miller

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#### 3 [Stasis: flexible transactional storage](#)

Russell Sears, Eric Brewer

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**Publisher:** USENIX Association

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4 [Router plugins: a software architecture for next-generation routers](#)

Dan Decasper, Zubin Dittia, Guru Parulkar, Bernhard Plattner

February IEEE/ ACM Transactions on Networking (TON) , Volume 8 Issue 1  
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**Keywords:** communication system routing, communication system security, internet, modular computer systems

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Yong Chen, Surendra Byna, Xian-He Sun, Rajeev Thakur, William Gropp

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**Keywords:** c-store, column-oriented dbms, column-store, compression, invisible join, tuple materialization, tuple reconstruction


7 [Reconciling performance and programmability in networking systems](#)



Jayaram Mudigonda, Harrick M. Vin, Stephen W. Keckler

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Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

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**Keywords:** data cache, memory bottleneck, multithreading, packet processing, processor architectures, reconfigurable architectures, routers

Also published in:

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Nils Knaffa

January Cluster Computing , Volume 1 Issue 1

1998

Publisher: Kluwer Academic Publishers

Full text available:

 Additional Information: [full citation](#), [abstract](#), [references](#)

Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

Given the existence of powerful multiprocessor client workstations in many client-server object database applications, the performance bottleneck is the delay in transferring pages from the server to the client. We present a prefetching ...

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### 3 [Toward the parallelization of GSL](#)

[Jose Ignacio Aliaga](#), [Francisco Almeida](#), [Jose Manuel Badia](#), [Sergio Barrachina](#), [Vicente Blanco](#), [Maria Castillo](#), [Rafael Mayo](#), [Enrique S. Quintana](#), [Gregorio Quintana](#), [Alfredo Remón](#), [Casiano Rodríguez](#), [Francisco Sando](#), [Adrian Santos](#)

April The Journal of Supercomputing , Volume 48 Issue 1

2009

Publisher: Kluwer Academic Publishers

 Additional Information: [full citation](#), [abstract](#), [references](#)

Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

In this paper, we present our joint efforts to design and develop parallel implementations of the GNU Scientific Library for a wide variety of parallel platforms. The multilevel software architecture proposed provides several interfaces: a sequential ...

**Keywords:** GNU Scientific Library, Numerical scientific computing, Parallel algorithms and architectures, Web services

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**Keywords:** capabilities, object-based storage, scalability

5 [BORG: block-reORGanization for self-optimizing storage systems](#)

Medha Bhadkankar, Jorge Guerra, Luis Veeche, Sam Burnett, Jason Liptak, Raju Rangaswami, Vagelis Hristidis

February **FAST '09: Proceedings of the 7th conference on File and storage technologies** 2009

**Publisher:** USENIX Association

**Additional Information:** [full citation](#), [abstract](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 1

This paper presents the design, implementation, and evaluation of BORG, a self-optimizing storage system that performs automatic block reorganization based on the observed I/O workload. BORG is motivated by three characteristics of I/O workloads: non-uniform ...

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7 [Hyperion: high volume stream archival for retrospective querying](#)

Peter J. Desnoyers, Prashant Shenoy

June **ATC'07: 2007 USENIX Annual Technical Conference on Proceedings of the USENIX Annual** 2007

**Publisher:** USENIX Association

**Additional Information:** [full citation](#), [abstract](#), [references](#), [index terms](#)

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Network monitoring systems that support data archiving and after-the-fact (retrospective) queries are useful for a multitude of purposes, such as anomaly detection and network and security forensics. Data archiving for such systems, however, is complicated ...

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11 [Cumulvs: Interacting with High-Performance Scientific Simulations, for Visualization, Steering and Fault Tolerance](#)

[James A. Kohl](#), [Torsten Wilde](#), [David E. Bernholdt](#)

May **International Journal of High Performance Computing Applications** , Volume 20 Issue 2  
2006

**Publisher:** Sage Publications, Inc.

**Additional Information:** [full citation](#), [abstract](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

High-performance computer simulations are an increasingly popular alternative or complement to physical experiments or prototypes. However, as these simulations grow more massive and complex, it becomes challenging to monitor and control their execution. ...

**Keywords:** CCA, CUMULVS, ECho, Global Arrays, MPI, MxN, PVM, computational steering, fault tolerance, model coupling, visualization

12 [Reconciling performance and programmability in networking systems](#)



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October 2007 **SIGCOMM Computer Communication Review** Volume 37 Issue 4

13 [Clotho: decoupling memory page layout from storage organization](#)

Minglong Shao, Jiri Schindler, Steven W. Schlosser, Anastasia Ailamaki, Gregory R. Ganger

August **Vldb '04: Proceedings of the Thirtieth international conference on Very large data bases - Volume 30**, Volume 30

**Publisher:** VLDB Endowment

Full text available: [Pdf](#) (212.45 KB)

**Additional Information:** [full citation](#), [abstract](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): 4, Downloads (12 Months): 30, Downloads (Overall): 42, Citation Count: 1

As database application performance depends on the utilization of the memory hierarchy, smart data placement plays a central role in increasing locality and in improving memory utilization. Existing techniques, however, do not optimize accesses to all ...

14 [Global memory management for a multi computer system](#)

Dejan Milojicic, Steve Hoyle, Alan Messer, Albert Munoz, Lance Russell, Tom Wylegala, Vivekanand Vellanki, Stephen Childs

August **WSS'00: Proceedings of the 4th conference on USENIX Windows Systems Symposium - 2000** Volume 4, Volume 4

**Publisher:** USENIX Association

**Additional Information:** [full citation](#), [abstract](#), [references](#), [index terms](#)

**Bibliometrics:** Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

In this paper, we discuss the design and implementation of fault-aware Global Memory Management (GMM) for a multikernel architecture. Scalability of today's systems is limited by SMP hardware, as well as by the underlying commodity operating systems ...

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